

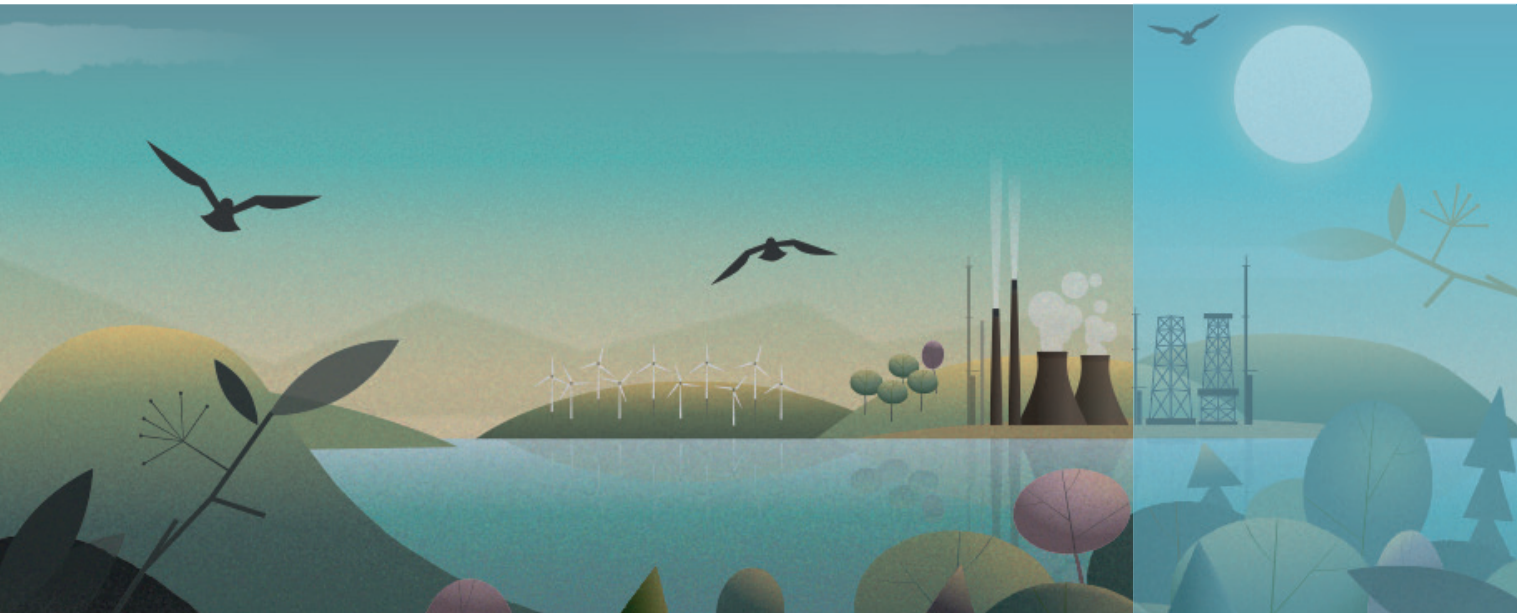
CASE STUDY

Carbon Literacy: Knowledge Excellence in the design of online learning content

A Virtual College Case Study

Carbon Literacy
Project





“ Carbon Literacy embeds awareness of the reality of climate change, and the impacts – bad and good - of everyday actions. ”

Executive summary

Climate change is widely recognised as the biggest challenge we face as a global community. The award-winning Carbon Literacy Project (CLP), founded in Manchester, aims to offer every person living, working and studying across the UK and beyond, a day's worth of certified Carbon Literacy training by 2020 so that they can certify as Carbon Literate.

Bespoke online learning development is a key focus for 'learning technologies supplier of the year', Virtual College.

Working in collaboration with The Carbon Literacy Project, Virtual College has created an interactive e-learning course that offers Carbon Literacy learners a solid understanding of climate change, how it is already affecting them, and advice on what actions they can take to help move their own organisations toward a low carbon culture.

From animated videos, games and audio commentary, to compelling infographics, content was designed to meet the needs of a broad target audience, whilst at the same time catering for highly customised content for specific audiences, to ensure immediate relevance for all learners.



A complicated subject with a fresh approach

Dave Coleman, Managing Director of The Carbon Literacy Project, explained: "Carbon Literacy embeds awareness of the reality of climate change, and the impacts – bad and good - of everyday actions."

The Carbon Literacy Project had seen some of Virtual College's previous work with Manchester City Council and was impressed with the quality of product that could be designed. They therefore approached Virtual College to work collaboratively on designing a ground-breaking interactive e-learning course.

With a wealth of complex information, they needed Virtual College to produce a course so people could meet the requirements of the eight 'Knowledge' elements of the Carbon Literacy Standard to pursue certification, or use it as a standalone tool.

Carbon Literacy has clear educational requirements and a clear 'story arc', but the project also had a wealth of information, resources and evidence which needed to be distilled down.

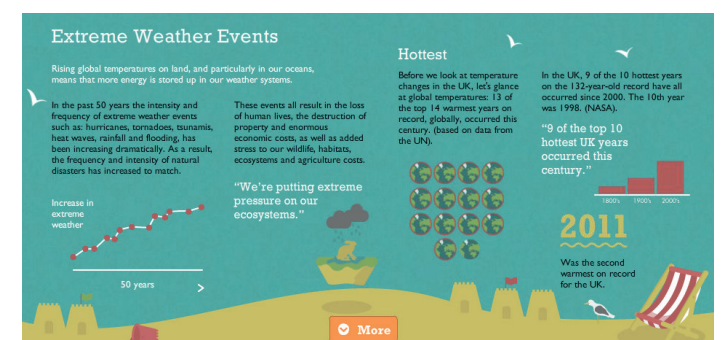
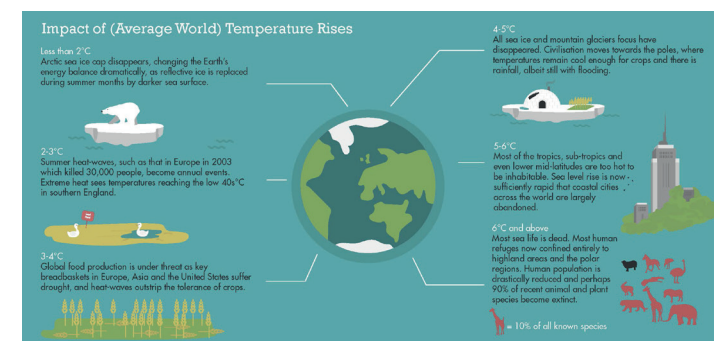
Virtual College worked to convert all these resources into attractive and engaging screens, infographics and activities which would involve the learner, at a pace that suited them.

The course was designed to allow a clear path through a forest of information, but with opportunities to stop and explore, as the learner desires.

It includes signposts and links to other places, so that the course has become not just a one-off experience, but a resource to be returned to again and again.

Virtual College needed to develop a course that was creative, engaging and approachable, but also rigorous and comprehensive to meet the knowledge requirements of the Carbon Literacy Standard.

Hannah Brindle, Divisional Director, Growth & Innovation at Virtual College, carefully chose an agile, cross-functional Virtual College team to aid creativity, and to ensure the course was compelling by focussing on the structure, the tone, the story, the science, the challenges, the choice and the desire to make a change.

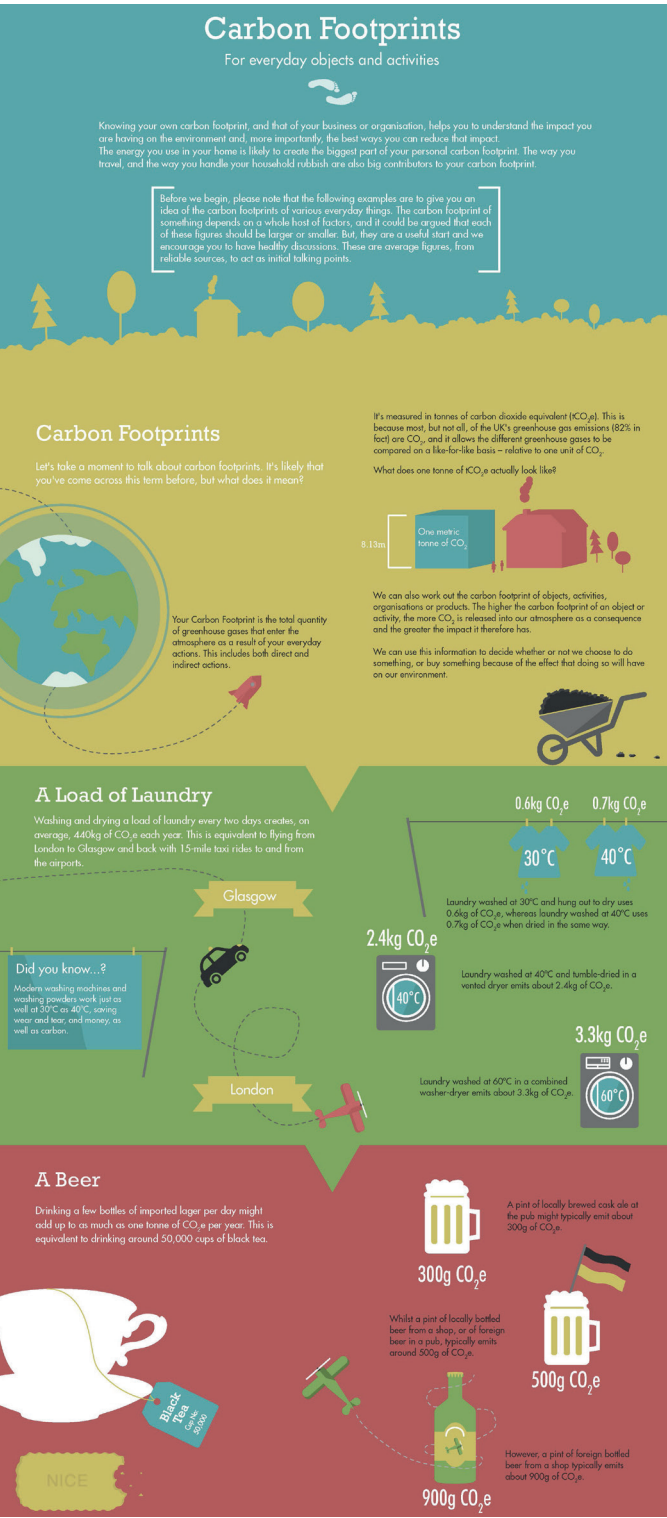
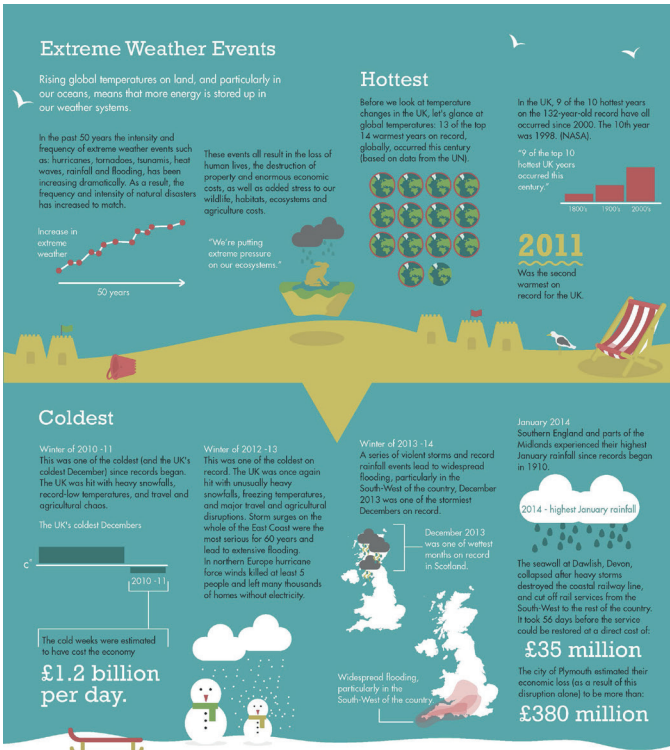


Developing a clear understanding

Virtual College worked in close collaboration with the CLP to understand the subject and the CLP’s needs in detail, employing a consultative approach so that it could offer specific solutions in a professional and considered manner.

Working as project manager, Virtual College’s Chloe Weatherhead, commented: “The best way to understand what will suit our partners is to ensure we clearly understand their project at the outset, and be intimately involved with the project from the very beginning.

“Having clearly established their objectives, with The Carbon Literacy Project in particular, we collaborated very closely, and exchanged information and ideas daily, using video-conferencing and cloud based systems.”



The creation process

While climate change might be an ‘everyday’ issue we’re used to seeing in the news, some of the science behind it isn’t.

Virtual College curated the CLP’s content and brainstormed creative, engaging and fun ways to take complex information from inaccessible to innovative, making it ideal for learners of all abilities.

Instructional Design is a technique used to promote learning acquisition. Explaining facts and theories through infographics turned dense information into vibrant visual displays. The resources also featured:

- Short videos
- Clickable infographics
- Interactive maps and section quizzes
- Gamification
- A key-words glossary
- Pre and post course learning assessment
- A final test assessment

A key challenge was to keep learner engagement levels high for a total of three-hours – the specified length the virtual course needed to last for it to meet the customer’s requirements.

Virtual College’s graphic designers worked alongside specialist instructional designers to deliver an interactive user experience for each of the eight modules.

Whilst flexibility is built into each stage, Virtual College’s content development follows a rigorous process established over years of experience as the most rapid and effective method of developing bespoke content.

Dave Coleman, Managing Director of The Carbon Literacy Project, commented: “Rather than working as a supplier, Virtual College worked with us as a collaborative partner, using cloud and video conferencing systems to talk almost daily as we worked jointly to shape our vast amounts of content into an engaging and enjoyable ‘best in sector’ e-learning resource.”

We are getting close
to **catastrophic**
tipping points,
despite the fact
that most people
barely notice
the warming yet.

Dr. James Hansen
NASA Scientist

The results

There is a significant volume of content and level of knowledge learners need to acquire to be certified as Carbon Literate but the e-learning course allows learners to take it at their own pace and manage their own low-carbon education – whether focussed on their role at work, their role as a citizen, or both.

Learners have responded extremely positively to the final course. Results say it all: whilst only 23% of learners rated their knowledge of climate change as ‘a lot’ or ‘quite a lot’ before training, after taking the Carbon Literacy: Knowledge course, this rose to over 84%. Before completing their e-learning, only 55% of learners rated their motivation to take action to tackle climate change as ‘quite a lot’ or ‘a lot’ which increased to 82% afterwards.

However, the very strong quantitative results still only tell part of the story. Qualitative comments from learners are almost universally glowing, with numbers stating that it is the best piece of e-learning they have ever done, and enthusing about how motivated it has made them to act – inside their organisations and out.

Robin Lawler, CEO of Northwards Housing, said: “At Northwards we’ve just completed the training of our entire workforce as Carbon Literate, and the use of the Carbon Literacy e-learning module has been a key tool enabling us to do this.

“It delivers quality information, engagingly presented and motivational for our staff; so that they arrive informed and ready to act in support of our internal aims and committed to our wider external work to operate more sustainably and address climate change within the social housing sector.”

Organisational trainers report that the Carbon Literacy: Knowledge e-learning course has not only saved their organisations time and money, by reducing the need for half-day face to face workshops from two down to one, but building on the e-learning, actually made the single workshop they have led, a much more valuable experience for learners.

Dr Ali Abbas, Chair, The Carbon Literacy Trust, added: “We’ve spent some time researching online climate education resources, and we’ve not found anything that comes close to this e-learning solution.

“We are delighted with the quality of Carbon Literacy: Knowledge. It has enabled us to engage more effectively with large organisations, and allowed them to achieve some of the benefits of low-carbon education much more cost effectively and sooner, than if we had solely pursued more traditional training routes.

“The collaborative partnership-working approach between ourselves and Virtual College has enabled us to reach new audiences and deliver our charitable aim of climate education at far greater scale and far sooner than if we had to wait to enter a traditional supplier/client relationship.”

Using the course as an e-learning resource means that trainers no longer have to deliver the complex science side of the topic cold, or present it as experts, but can now put their time to better use in generating more productive discussions and more effective actions with and between learners.

Creatively, a labyrinth of hard-to-consume content has been converted it into one understandable, accessible journey, with a clear destination.

By collaborating effectively with the Carbon Literacy Project and making them part of the creative process, Virtual College has delivered a unique solution featuring a diverse range of learning techniques to a broad target audience.

Dave Coleman, of The Carbon Literacy Project, commented:

“The Carbon Literacy Project has been repeatedly recognised as unique worldwide – an initiative that works with citizens, educators and organisations to deliver low carbon culture change to our businesses and communities, at city scale and beyond.

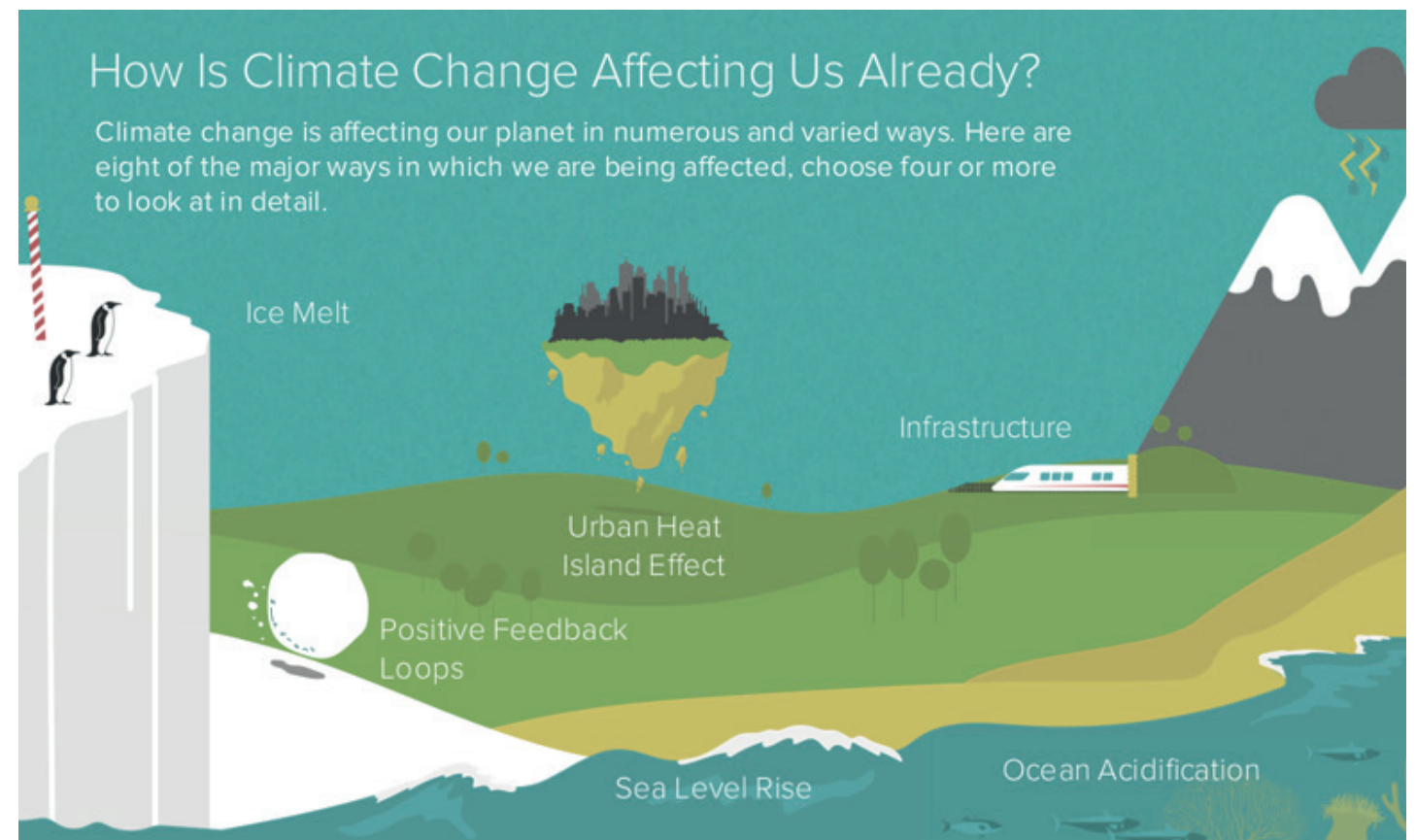
“The Carbon Literacy: Knowledge e-learning course is a vital tool in helping us do this, and delivers high quality learning, cost effectively, at scale, to diverse audiences, dovetailing perfectly with the face to face work and workplace initiatives that organisations implement.”

The Carbon Literacy Project was recently recognised by the United Nations / C40 and ICLEI as a Transformative Action Programme project at the United Nations COP 21 Climate Change Summit in Paris.

Described as a project “which if rolled out at scale could make a material difference to the way we tackle climate change”, it is one of less than 100 projects worldwide to receive this accolade.

Virtual College’s Divisional Director, Growth & Innovation, Hannah Brindle, commented: “Knowing that we’ve played a vital part in one city region’s journey to a low carbon future, which is now going on to inspire change around the world, is exactly why all of us at Virtual College are so proud of this project.”

“Quality information, engagingly presented and motivational for our staff.”



Learner **feedback**

Ninety-three per cent of respondents stated that they had changed their behaviour as a consequence of the course and had actively made changes in their lives.

"I think there is a wider appreciation amongst my colleagues about how small changes in our day to day lives can cumulatively have a big impact environmentally, both in terms of work and possibly even more on a personal level."

"I bought a more economical car and changed my driving style to conserve fuel. Never over-fill the kettle, turn off my work monitor and others when away from my desk, shower in less than 6 minutes and talk about the importance of reducing our carbon footprint with others. I've considered changing to a locally produced lager also but haven't as yet!"

"I have stopped driving the car at weekends as much as possible and have cut down on petrol by about a 25%"

"My whole family are far more conscious about looking at where fruit and veg come from and try to keep food miles down wherever possible. We also walk more for journeys of up to a mile and a half where we may have previously used the car."

"I now make a bigger attempt to cycle more to work and I have started up the Cycle scheme for our employees."



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About Virtual College

With over 2.4 million online learners, Virtual College is one of the leading providers of e-learning in the UK. For over twenty years, we have provided online courses to individuals and companies across the world, breaking down the boundaries of traditional learning to deliver cost reducing, time efficient training. Unlike many other e-learning providers, our training extends to actual programme and qualification creation and delivery - resulting in a unique blended solution. The knowledge, experience and feedback that this delivery provides helps ensure that we strive to continually improve our solutions.

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